

(Say) (7), *Fusconais flava* (Rafinesque) (12), *Pleurobema cordatum* Rafinesque (5).

This is a fairly respectable fauna, and it doubtless reflects the ameliorating influence of the unpolluted waters of nearby Shoal Creek.

LITERATURE CITED

- Murray, H. D. and A. B. Leonard. 1962. Handbook of unionid mussels in Kansas. Misc. Pub. Univ. Kansas Mus. Nat. Hist. 28: 1-184.
- Scammon, R. E. 1906. The Unionidae of Kansas, Part 1. Kansas Univ. Sci. Bull. 3: 279-376.
- Simpson, C. T. 1914. A descriptive catalogue of the naiades or pearly freshwater mussels. Pub. Bryant Walker, Detroit, Mich., 1914: i-xii; 1-1540.
-

A NEW POMATIASID FROM CHIAPAS, MEXICO

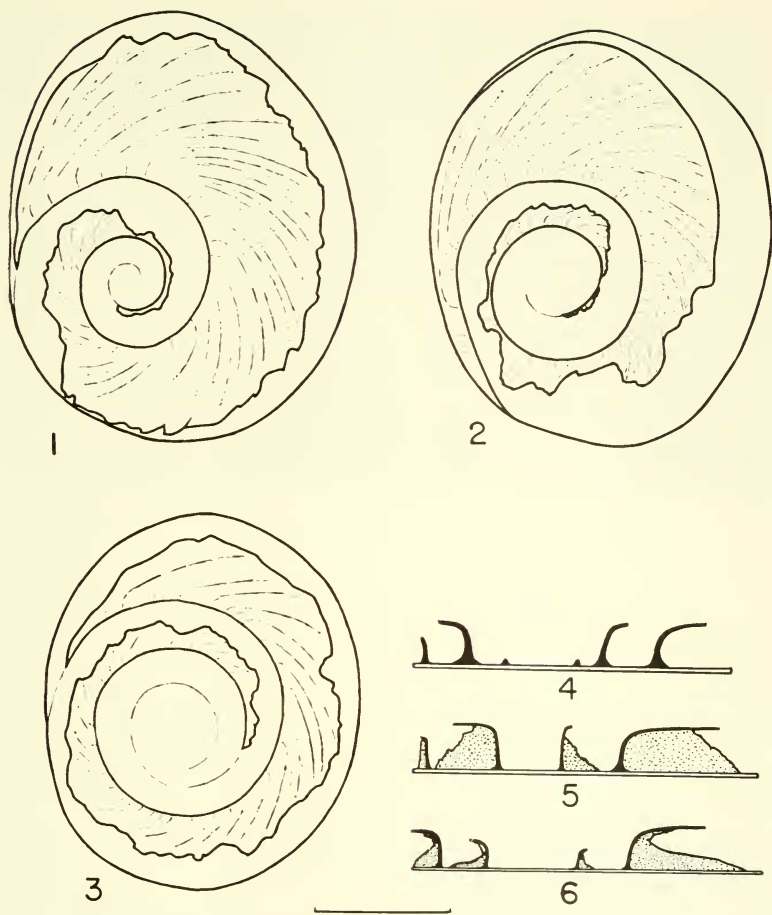
By FRED G. THOMPSON

Florida State Museum, University of Florida

Recent collections from Mexico have produced an interesting new land snail of the family Pomatiasidae. Characteristics of its operculum and radula place it in the genus *Choanopoma*, subgenus *Choanopomops* as defined by Baker (1928: 47-49). Because of its smooth, costulate sculpture it is named:

CHOANOPOMA TERECASTATUM, new species. Figs. 1, 5, 7

Shell (figs. 7) conical, 0.53-0.60 times as wide as long. Shiny; light orange in color with vague alternating light and dark zones; slightly darker on upper whorls. Peristome and aperture same color as rest of shell. Shell with 4 faint, narrow, broken rose-colored bands which may be indistinct in old specimens; upper 2 bands located near periphery of whorls and visible through length of shell; lower 2 bands evident only on base of last whorl. Decollate, 4.2-4.7 whorls remaining. About 2.0-2.5 juvenile whorls lost in adult shells. Apical plug purplish, sloping, about $\frac{1}{4}$ whorl long. Suture deeply impressed. Whorls strongly inflated; suprapерipheral area moderately curved, sloping, not shouldered; peripheral and subperipheral area more strongly rounded. Umbilicus about $\frac{1}{5}$ - $\frac{1}{6}$ diameter of shell. Aperture adnate to preceding whorl; broadly ovate, 1.07-1.16 times as high as wide; 0.34-0.36 times length of decollate shell. Inner peristome not extended; demarcated only as a strong annulation on lip. Outer peristome strongly expanded;



Opercula of Mexican *Choanopoma*. Fig. 1, *C. terecostatum* Thompson, frontal view. 2, *C. martensianum* (Pilsbry), frontal view. 3, *C. sumichrasti chiapense* Crosse and Fischer, frontal view. 4, *C. sumichrasti chiapense* Crosse and Fischer, transverse section. 5, *C. terecostatum* Thompson, transverse section. 6, *C. martensianum* (Pilsbry), transverse section. Scale equals 1 mm.

about 0.5-0.8 mm. wide or about $1/5$ - $1/7$ width of aperture; widest at upper corner, which is vertical and not deflected. Outer peristome constricted in parietal region and only slightly flexed forward. Sculpture of adult shell consisting of smooth, uniformly spaced axial ribs that are slightly oblique and weakly recurved. Five-six ribs per mm. on body whorl; slightly more crowded on early whorls.

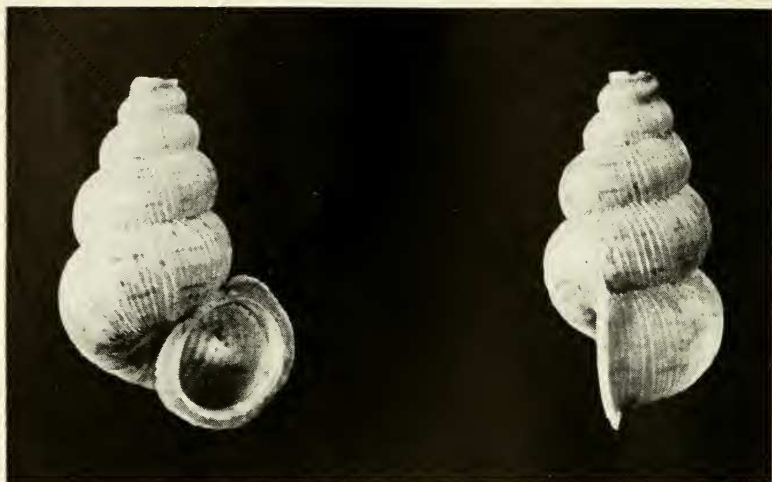


Fig. 7. *Choanopoma terecostatum* Thompson, Type (UMMZ. 216554).

Ribs of uniform intensity from suture to umbilicus, where they become reduced to sharp threads. Spiral sculpture absent. Two embryonic whorls (lost from adult shells) smooth.

Operculum flat, consisting of about 3.5 rapidly expanding whorls. Nucleus acentric. Calcareous lamella broadly reflected over basal chondroid plate and nearly covering latter (fig. 1). Reflected lamella parallel to chondroid plate and supported by numerous narrow calcareous buttresses and ribs that parallel growth striations (fig. 5). Lamellae of adjacent whorls separated.

Measurements of type: length, 12.4 mm.; minor diameter, 7.1 mm.; aperture length, 4.4 mm.; aperture width, 4.1 mm.; lip, 0.8 mm. wide; 4.4 whorls remaining.

Measurements of paratypes: length, 12.0-13.1 mm.; minor diameter, 6.5-7.3 mm.; aperture length, 4.2-4.4 mm.; aperture width, 3.8-4.1 mm.

Type locality: Limestone hillside 15.8 miles northwest of Ocozocoautla, Chiapas; 2700 ft. alt. TYPE: UMMZ. 216554; collected July 21, 1965 by Fred G. Thompson. *Paratypes*: UMMZ. 216555 (6), USNM, 669201 (1), ANSP. 305061 (1), MCZ. 260881 (1), Museo Nacional de Mexico (1); same data as the type. UMMZ. 216556 (1); 13.4 mi. n.w. of Ocozocoautla.

C. terecostatum is distinguished from all other mainland species

of the genus *Choanopoma* (as defined by Solem, 1961: 194-195) by its smooth, costulate sculpture, its lack of spiral sculpture, and its operculum, which bears a broadly reflected calcareous lamella reinforced by numerous thin calcareous buttresses and ribs.

Relationships with other mainland forms are indicated by the structure of the operculum. On the basis of opercular similarities *C. terecostatum* is closely related to the group of species that contains *C. martensianum* (Pilsbry) (figs. 2, 6), *C. gaigei* Bequaert and Clench, *C. largillierii* (Pfeiffer) and *C. radiosum* (Morelet), although no particular relationship is indicated with any of these species. It is distinguished from all by its lack of spiral sculpture and by its smooth axial ribs. *C. martensianum* is geographically the closest related form to *C. terecostatum*, being found in adjacent regions of Tabasco. *C. martensianum* differs from *C. terecostatum* in being more slender (0.40-0.50 times as wide as long), in having rugose sculpture due to the occurrence of nodes on the axial ribs where they cross spiral threads, in having the upper corner of the outer peristome recurved posteriorly, and in being light brown in color with four or more broken peripheral bands.

Superficially, *C. terecostatum* resembles *C. sumichrasti* Crosse and Fischer because of similarities of their axial sculpture and their lack of spiral sculpture, but these similarities are secondary, for *C. sumichrasti* has a simple reflected opercular lamella that lacks reinforcing calcareous buttresses or deposits (figs. 3, 4).

The shell of *Choanopoma terecostatum* is nearly identical to that of *Chondropoma rubicundum* (Morelet), but the latter species is immediately recognized by its simple, chitinous operculum.

Specimens Examined. Material examined during this study significantly adds to the distributions of several species reported by Solem (1961: 191-213).

Choanopoma martensianum (Pilsbry)

Tabasco: 2.6 mi. e. Teapa; 1.5 mi. e.n.e. Teapa; 4.0 mi. w. of Teapa; hill 9.2 mi. s. Tacotalpa.

Choanopoma radiosum (Morelet)

Guatemala (Dept. Izabel): Puerto Matias de Galvez; 4 km. n. of Morales.

Choanopoma sumichrasti var. *chiapense* Crosse and Fischer

Chiapas: 8.6 mi. e. Chiapa de Corzo, 3100'; 14.9 mi. e. of Chiapa de Corzo, 4400'; 8.0 mi. n. Tuxtla Gutierrez, 3800'.

Choanopoma sumichrasti var.

Chiapas: 4.5 mi. n. Bochil, 4600'.

Choanopoma sumichrasti var.

Chiapas: 1.4 mi. s. La Trinitaria.

Choanopoma sumichrasti (?) var.

Chiapas: 8.2 mi. s. Solusuchiapa, 1600'.

Choanopoma gaigei Bequaert and Clench

Campeche: Eight localities (to be reported later). *Quintana Roo*: 4.0 mi. e. Xpujil (Campeche); 7.1 mi. n.n.w. Polyuc; 2.3 mi. s.s.e. Polyuc.

Yucatan: 0.8 mi. n.e. Becanchen.

Choanopoma largillierti (Pfeiffer)

Campeche: Seventeen localities (to be reported later). *Quintana Roo*: 4.0 mi. e. Xpujil (Campeche); 7.1 mi. n.n.w. Polyuc; 2.3 mi. s.s.e. Polyuc. *Yucatan*: 7.0 mi. s.s.e. Uman; 19.1 mi. s.s.e. Uman; 0.8 mi. n.e. Bechanchen; 10.0 mi. n.e. Bechanchen; 3.2 mi. s. Progreso; 1.0 mi. s.s.e. Puerto Telchac; Uxmal.

Choanopoma sp.

Ten localities in Campeche, Yucatan and Quintana Roo. (To be reported later.)

Material upon which this study is based was collected with the support of the National Institutes of Health research grant number 5 R01. GM. 12300-02. All material, unless otherwise stated, has been deposited in the Florida State Museum.

LITERATURE CITED

- Baker, H. B. 1928. Mexican mollusks collected for Dr. Bryant Walker in 1926, I. *Occ. Pap. Mus. Zool. Univ. Mich.*, (193): 1-63.
- Solem, A. 1961. A preliminary review of the pomatiasid land snails of Central America (Mollusca, Prosobranchia). *Arch. Moll.*, 90: 191-213.

NOTES AND NEWS

DATES OF THE NAUTILUS. — Vol. 79, no. 1, pp. 1-36, iii, pls. 1-3, was mailed July 9, 1965. No. 2, pp. 37-72, iii, pl. 4, Oct. 15, 1965. No. 3, pp. 77-108, iii, Jan. 25, 1966. No. 4, pp. 109-144, iii, and Index, pp. iii-vii, April 25, 1966. — H. B. B.

AMERICAN MALACOLOGICAL UNION. — The 32nd annual meeting will be held Aug. 22-27, 1966, at the University of North Carolina,